

55146-73

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

Danielle A. Larochelle  
Nufarm Americas Inc.  
4020 Aerial Center Parkway, Suite 101  
Morrisville, NC 27545

MAR 04 2014

Subject: Ultra Flourish Agricultural Fungicide  
EPA Reg. No. 55146-73  
EPA Decision Number: 487514  
Your master label and supplemental label for tobacco submitted on 1/20/14 and resubmitted on 2/25/14 to correct an error in the use directions

Dear Ms. Larochelle:

The master label and supplemental label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended are acceptable.

One copy of the labels stamped "Accepted" are enclosed for your records. These labels supersede all labels previously accepted for this product. Please submit one copy of the final printed labels before the product is released for shipment. If you have any questions, please contact Heather Garvie by phone at: 703-308-0034 or via email at: [garvie.heather@epa.gov](mailto:garvie.heather@epa.gov).

Sincerely,

A handwritten signature in black ink that reads "Hope A. Johnson".

Hope A. Johnson  
Product Manager 21  
Fungicide Branch  
Registration Division

Enclosure: Stamped labels "Accepted"

# ULTRA FLOURISH®

## AGRICULTURAL FUNGICIDE

For the control of certain diseases in various crops caused by the Oomycete class of fungi

**ACTIVE INGREDIENT:**

Mefenoxam: D-Alanine, N-(2,6-dimethylphenyl)-N-(methoxyacetyl)-, methyl ester ..... 25.1%

**OTHER INGREDIENTS:** ..... 74.9%

**TOTAL:** ..... 100.0%

Contains Petroleum Distillates  
Contains 2 pounds mefenoxam per gallon

**KEEP OUT OF REACH OF CHILDREN**  
**WARNING / AVISO**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.  
(If you do not understand the label, find someone to explain it to you in detail.)

**SEE INSIDE LABEL BOOKLET FOR FIRST AID AND PRECAUTIONARY STATEMENTS**

**For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300**  
**For Medical Emergencies Only, Call (877) 325-1840**

EPA REG. NO. 55146-73  
EPA EST. NO. \_\_\_\_\_

Manufactured For  
NUFARM AMERICAS INC.  
AGT DIVISION  
11901 S. Austin Avenue  
Alsip, IL 60803



**ACCEPTED**

**MAR 04 2014**

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act,  
as amended, for the pesticide  
registered under  
EPA Reg No. 55146-73

NET CONTENTS: \_\_\_\_\_ Gallons (\_\_\_\_ L)

[Designation as "NONREFILLABLE" or "REFILLABLE" for containers > 5 GAL]

<b>FIRST AID</b>	
<b>IF IN EYES</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF ON SKIN OR CLOTHING</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15 to 20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF SWALLOWED</b>	<ul style="list-style-type: none"> <li>• Immediately call a poison control center or doctor.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Do not give any liquid to the person.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>HOTLINE NUMBER</b>	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-325-1840 for emergency medical treatment information.	
<b>NOTE TO PHYSICIAN</b>	
If this product is ingested, lavage stomach. A slurry of activated charcoal in water can be left in the stomach. Contains petroleum distillate – vomiting may cause aspiration pneumonia.	

**PRECAUTIONARY STATEMENTS**  
**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**  
**WARNING / AVISO**

Causes substantial but temporary eye injury. Harmful if swallowed or absorbed through skin. Do not get in eyes or on clothing. Avoid contact with skin.

**PERSONAL PROTECTIVE EQUIPMENT (PPE):**

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category G on an EPA chemical resistance category selection chart.

**Applicators and other handlers must wear:**

- Long-sleeved shirt and long pants
- Chemical-resistant gloves such as barrier laminate or Viton
- Shoes plus socks
- Protective eyewear

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

**Engineering Controls**

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

**USER SAFETY RECOMMENDATIONS**

**Users Should:**

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

**ENVIRONMENTAL HAZARDS**

Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Apply only as specified on this label. Do not apply when weather conditions favor drift from treated areas. Do not contaminate water when disposing of equipment washwater or rinsate.

**Groundwater Advisory**

This chemical has properties and characteristics associated with chemicals detected in groundwater. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

**Surface Water Advisory**

This product may contaminate water through drift of spray in wind. This product has a high potential for runoff for several months or more after application. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product. A level, well maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from rainfall-runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

**Physical or Chemical Hazards**

Do not use or store near heat or open flame.

**DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

**AGRICULTURAL USE REQUIREMENTS**

Use this product only in accordance with its labeling and with the Worker Protection Standard (WPS), 40 CFR part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statement of this label about personal protective equipment (PPE) and restricted-entry interval (REI). The requirements in this box only apply to users of this product that are covered by the WPS.

Do not enter or allow worker entry into treated areas during the REI of 48 hours.

**Exception:** If the product is soil-injected or soil-incorporated, the WPS, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water is: Coveralls, chemical-resistant gloves such as barrier laminate or Viton, shoes plus socks and protective eyewear.

Failure to follow the directions for use and precautions on this label may result in crop injury, poor disease control, or illegal residues.

**USE PRECAUTIONS**

This product is a systemic fungicide for use on selected crops to control certain disease caused by members of the Oomycete class of fungi. Other fungicides must be used to control diseases incited by other classes of fungi.

- Where rate ranges are specified on this label, use the higher rate when heavy disease pressure is expected and the lower rate when disease pressure is expected to be light unless otherwise noted.
- Under conditions of severe disease pressure when more than the label-specified number of applications of this product may be required, make additional fungicide treatments with other fungicides registered for the crop/disease found on this label.
- To avoid spray drift, do not apply under windy conditions. Avoid spray overlap, as crop injury may result.

**USE RESTRICTIONS**

- Do not use this product in foliar applications unless specified on this label.
- Do not use this product in greenhouses, lath houses, float houses, and hydroponic facilities.
- Do not use this product for disease control in bedding plants, transplant trays or nurseries.
- Do not dip plants or roots, spray bare roots, or use a transplant water treatment with solutions of this product.
- Maximum usage when applying both metalaxyl and mefenoxam containing products to the same crops within the same season: Do not apply more than the maximum seasonal total for the active ingredient as stated on the label of the product containing the lowest seasonal total on that crop.

**RESISTANCE MANAGEMENT**

This product is a systemic fungicide having a specific mode of action and could be subject to development of resistant strains of fungi. Development of resistance cannot be predicted. If treatment is not effective following the use of this product as specified, a resistant strain of fungi may be present. If the treatment is ineffective due to the presence of a mefenoxam resistant strain of fungi, neither this product nor any other fungicide with similar action will effectively control that disease. Consideration should then be given to the prompt use of other types of suitable fungicides. Do not make foliar applications to field grown tobacco, or other crops, unless specified since this practice may encourage more rapid development of resistance. Consult with your State Agricultural Experiment Station or Extension Service Specialist for guidance on your particular crop and disease control situation.

**ROTATION (PLANTBACK) RESTRICTIONS**

**REPLANTING**

If replanting is necessary, additional applications of this product may be made, provided that the total amount of mefenoxam applied does not exceed the maximum application rate or seasonal amount allowed for the specific crop.

**ROTATION (PLANTBACK) RESTRICTIONS**

Do not plant any crop that is not registered for use with mefenoxam in mefenoxam-treated soil for a period of 12 months unless a shorter interval is specified on the following list.

ROTATIONAL CROP	PLANTING TIME FROM LAST APPLICATION
Alfalfa (including birdsfoot trefoil)	0 days
Asparagus	
Brassica (Cole Crop) Vegetables (e.g., broccoli, cabbage, cauliflower)	
Clover	
Cotton	
Cucurbit Vegetables	
Fruiting Vegetables	
Garlic	
Globe Artichoke	
Herbs (fresh and dried)	
Leafy Vegetables except Brassica (e.g., lettuce, spinach, celery)	
Legume Vegetables (e.g., beans and peas, succulent and dried)	
Onions (dry bulb, green)	
Peanuts	
Pineapples	
Root and Tuber Vegetables	
Soybeans	
Strawberries	
Sunflower	
Tobacco	
Cereal Grains (other than Corn)	14 days
Corn	9 months
Crops Not Intended for Food or Feed	0 days
All Other Crops Intended for Food or Feed	12 months

**MIXING PROCEDURES**

Add 1/4 to 1/2 of the required amount of water to the spray tank, add the proper amount of this product, then add the rest of the water. When tank mixing other products with this product, follow the proper sequence for adding products to the spray tank. Wettable powders or water dispersible granules should be added to the water in the tank first, followed by flowable products, with emulsifiable concentrates, such as this product, added last. Provide sufficient agitation during mixing and application to maintain a uniform emulsion.

Unless otherwise prohibited on this label or the label of an intended tank mix partner, this product may be applied in combination with any pesticide registered for the same crop, timing, and method of application.

Observe the most restrictive of the labeling precautions and limitations of all products used in tank mixtures.

**IMPORTANT: PESTICIDE TANK MIXES MAY INCREASE THE RISK OF MIXING INCOMPATIBILITIES, REDUCED EFFECTIVENESS AND/OR CAUSE CROP INJURY OR LOSS.**

**COMPATIBILITY**

Before full-scale mixing of this product with other pesticides, fertilizers, secondary plant nutrients, adjuvants, surfactants or oils, you must determine the compatibility of the proposed mixture. Use proportionate quantities of each ingredient and mix in a small container. Always mix one product thoroughly with the diluent before adding another product. If no incompatibility is evident after 30 minutes, the mixture is generally compatible for spraying. To evaluate potential short term effects of applying the mixture, test the tank mix combination on a few plants or a small area before larger-scale treatments. Wait at least 2 to 3 days for problems to become apparent.

**IMPORTANT: MIXING WITH OTHER SUBSTANCES MAY INCREASE THE RISK OF MIXING INCOMPATIBILITIES, REDUCED EFFECTIVENESS AND/OR CAUSE CROP INJURY OR LOSS.**

**PRODUCT APPLICATION INSTRUCTIONS**

Apply this product by ground or air in sufficient water or liquid fertilizer to provide uniform coverage of the soil surface. Apply in a minimum of 20 gallons per acre for ground applications and 5 gallons per acre by air. Refer to the specific crop application directions.

**Banded Applications:** For banded applications, the area actually is the area covered by the band, not total cropland area planted. Some row-crop directions are based on treating in-the-row and these rates generally are specified as amounts (fluid ounces) of product per certain row length (often 1,000 feet). Others express rates as amount per treated acre, which means the total area treated with the pesticide. If rates are expressed as amount per treated acre and banded applications are used, the amount of pesticide used per acre will be proportionately less. The following formula can be used to calculate the amount of this product needed per acre of crop when banded applications are made.

Calculate the amount of this product needed for band treatment by the formula:

$$\frac{\text{band width in inches}}{\text{row spacing in inches}} \times \text{broadcast rate per acre} = \text{amount needed per acre of field}$$

**In-Furrow Applications:** For in-furrow applications, apply this product as an in-furrow spray in 3 to 7 gallons of water per acre at planting. Mount the spray nozzle so the spray is directed into the furrow just before the seeds are covered. Following is a table of the common row spacings and the amount of this product applied per acre.

Product Use Rate fl. oz./ 1,000 row feet (oz. a.i. / 1,000 row feet)	ULTRA FLOURISH (Fluid Ounces per Acre)								
	20 inch rows	22 inch rows	24 inch rows	30 inch rows	32 inch rows	34 inch rows	36 inch rows	38 inch rows	40 inch rows
0.15 (0.038)	4.0	3.6	3.2	2.6	2.5	2.3	2.2	2.1	2.0
0.3 (0.075)	7.8	7.0	6.5	5.2	5.0	4.6	4.3	4.1	4.0
0.56 (0.14)	14.5	13.3	12.2	9.8	9.1	8.5	8.1	7.7	7.3
0.84 (0.21)	22.0	20.0	18.3	14.5	13.7	13.0	12.2	11.6	11.0
20" = 26,136 row ft./acre			22" = 23,760 row ft./acre			24" = 21,780 row ft./acre			
30" = 17,424 row ft./acre			32" = 16,315 row ft./acre			34" = 15,374 row ft./acre			
36" = 14,520 row ft./acre			38" = 13,754 row ft./acre			40" = 13,068 row ft./acre			

**Instructions for Moving Ultra Flourish into the Root or Seed Zone**

To ensure maximum activity on soilborne pathogens, this product must be moved into the seed or root zone of the plant. Some crop directions specify incorporating the product to move it to the seed or root zone (preplant incorporated application, soil drenches, shank applications) while others place the fungicide into the seed or root zone (in-furrow sprays, soil injections, crown dips). For applications made

to the soil surface, rainfall will move the fungicide to the seed or root zone. However, if rainfall is not expected within 24 hours after application, mechanically incorporate before planting or sprinkler-irrigate after planting with 1/2 to 1 inch of water.

**APPLICATION THROUGH IRRIGATION SYSTEMS**

This product alone or in combination with other pesticides, which are registered for application through irrigation systems, may be applied through irrigation systems. Apply this product only through center pivot, solid set, hand move, moving wheel, micro-sprinkler, pressurized drench (flood) or drip (trickle), micro-irrigation such as a spaghetti-tube or individual tube irrigation, hand-held calibrated irrigation equipment such as the hand-held wand with injector, calibrated overhead watering booms, ebb and flow or bench flooding sub-irrigation systems. Do not apply this product through any other type of irrigation system. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.

Dilute this product with water on a 1/10 basis prior to injection into an irrigation system. Proper tank-mix agitation is required during this mixing procedure.

If you have any questions about calibration, you should contact the State Extension Service specialists, equipment manufacturers or other experts.

Do not connect an irrigation system (including greenhouse systems) used for pesticide applications to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.

A person knowledgeable of the chemigation system and responsible for its operation, or under supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

**OPERATING INSTRUCTIONS**

The system must contain a functional check valve, vacuum relief valve and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back-flow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check-valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

The irrigation line or water pump must include a functional pressure switch, which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

**APPLICATION INSTRUCTIONS FOR IRRIGATION SYSTEMS**

This product must be applied on the schedule specified in the specific crop use directions, not according to the irrigation schedule.

With the exception of citrus, this product has not been sufficiently tested when applied through irrigation systems to assure consistent product performance for all labeled uses. The following calibration and application techniques are provided for user reference, but do not constitute a warranty of fitness for application through sprinkler or drip irrigation equipment. Users must check with state and local regulatory agencies for potential use restrictions before applying any agricultural chemical through sprinkler or drip irrigation equipment.

**NOTE:** Do not inject this product at full strength or deterioration of valves and seals may occur. Use a dilution ratio of at least 10 parts water to 1 part of this product in the mix tank. This product is corrosive to many seal materials. Leather seals are best. EPDM or silicone rubber seals can be used, but should be replaced once a year. Do not use Viton, Buna-N, Neoprene or PVC seals.

**CENTER PIVOT IRRIGATION EQUIPMENT Use only with drive systems, which provide uniform water distribution**

Determine the size of the area to be treated. Determine the time required to apply 1/2 to 1 inch of water over the area to be treated when the system and injection equipment are operated at normal pressures recommended by the equipment manufacturer. Run the system at 80 to 95% of the manufacturer's rated capacity. Using water, determine the injection pump output when operated at normal line pressure. Determine the amount of this product required to treat the area covered by the irrigation system. Add the required amount of this product and sufficient water to the solution (mix) tank to meet the injection time requirements. Maintain constant solution tank agitation during the injection period. Continue to operate the system until all of the product solution has cleared the most distant sprinkler head.

**SOLID SET, HAND MOVE, AND MOVING WHEEL IRRIGATION EQUIPMENT**

Determine the acreage covered by the sprinklers. Fill injector solution tank with water and adjust flow rate to use the contents over a 20 to 30 minute interval. Determine the amount of this product required to treat the area covered by the irrigation system. Add the required amount of this product into the same quantity of water used to calibrate the injection period. Operate the system at the same pressure and time interval established during the calibration. Inject this product at the end of the irrigation cycle in 1/2 to 1 inch of water or as separate application to maximize the effectiveness of the fungicide. Stop injection equipment after treatment is completed. Continue to operate the system until all of the this product solution has cleared the last sprinkler head.

**MICRO SPRINKLER, DRIP IRRIGATION SYSTEMS, OVERHEAD WATERING BOOMS**

Each run of the irrigation system must be calibrated separately to determine the time it takes water to move through the system and to make sure all emitters in the system are putting out the same amount of water. Only pressure injection or venturi equipment is recommended. Determine the area to be treated in each irrigation run. Measure the output of each of the emitters or drip tubes closest to and farthest from the injector site. For calibration, substitute a concentrated detergent (such as Wisk) or a soluble fertilizer for this product in the injector tank. The detergent will bubble as it leaves the emitters. The time period over which bubbles occur should be checked for both the closest and farthest emitters. If these times are not within 2 minutes of each other, adjust the dilution ratio and/or the injection rate. If a soluble fertilizer is used, measure the time intervals with a salt bridge. If a drip system is being calibrated, substitute soluble fertilizer for this product in the injector and measure the time intervals with a salt bridge. (Step by step instructions) Before starting to calibrate, operate the system until all the emitters are putting out equal flow rates or until the system is operating at full pressure. Make up an indicator solution of detergent or fertilizer, using the same ratio to be used when mixing this product. Set the injector to apply the indicator solution at the injection rate to be used in the actual product application. Attach a 5 inch length of flexible tubing over the emitter closest to the injection point, another length over the emitter farthest away. Both emitters should be monitored to determine the time intervals that the indicator solutions are observed. Begin injecting the indicator solution. Direct the flow from the tubes at the emitters into a small container. Begin timing when the indicator solution is first detected, stop timing when the indicator solutions are no longer detected. If the period of detection of the indicator solution between the 2 emitters is within 2 minutes of each other, comparable coverage will be obtained. If they are not, make adjustments by increasing the dilution ratio, using more water per part of product, or adjust the injector to a slower flow rate. Once the system is calibrated, dilute the needed amount of this product with water using a minimum of 10 part of water to 1 part this product. Do not begin to inject this product into the system until all emitters are producing equal flow rates, or until the system is at full pressure. Inject this product into the system at the end of the irrigation set in 1/2 to 1 inch of irrigation water.

**CHEMIGATION SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS**

Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days of the year.

Chemigation systems connected to public water systems must contain a functional, reduced pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water systems should be discharged into a reservoir tank prior to pesticide introduction.

There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

The pesticide injection pipeline must contain a functional, automatic, quick closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain a functional, normally closed solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where the pesticide distribution is adversely affected.

Systems must use a metering pump, as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

**CROP SPECIFIC APPLICATION INFORMATION**

Use on the crops listed below is for field use only. Do not use on transplant trays, for dips, in greenhouses, lath houses, float houses, hydroponic production, or in bedding plant structures.

Soil surface sprays of this product will not be effective until the fungicide is moved into the root zone by rainfall or irrigation.

For banded applications, use the formula in the APPLICATION INSTRUCTIONS section of this label to calculate the amount of this product needed per acre for the band width actually used.

Equivalents: 1 quart = 2 pints.

<b>ALFALFA (Including birdsfoot trefoil)</b>		
<b>DISEASES</b>	<b>PRODUCT USE RATE</b>	<b>USE INSTRUCTIONS</b>
Damping-off ( <i>Pythium</i> spp.)  Root Rot ( <i>Phytophthora</i> spp.)	0.5 to 1 pint (pt) /Acre	Apply as a broadcast surface spray at planting in a sufficient amount of water for thorough coverage.  If alfalfa seed was previously treated with a metalaxyl or mefenoxam seed treatment product, use this product at 0.5 pt/A at planting.  If inter-seeding alfalfa into existing stands for renovation, apply 0.5 pt/A as a broadcast spray at planting.
♦ Do not feed green forage or cut hay for 60 days following application.		

**APPLES (Bearing and Nonbearing Trees)**

DISEASES	PRODUCT USE RATE	USE INSTRUCTIONS									
Crown Rot Collar Rot Root Rot ( <i>Phytophthora</i> spp.)	8 pt/Acre or 3 fl oz/ 1,000 ft <sup>2</sup>	<p><b>Soil Spray (Broadcast or Banded):</b> Apply in sufficient water to obtain thorough coverage. Apply in early spring before growth starts and in the fall after harvest but before the ground freezes. Treated area is based on the area under the tree canopy or the area of the sprayed row.</p> <p>Soil surface sprays of this product will not be effective until the fungicide is moved into the root zone by rainfall or irrigation.</p>									
	1 pt in 100 gal water	<p><b>Soil Drench:</b> Apply around the trunk of each tree in early spring before growth starts and in the fall after harvest but before the ground freezes. For new plantings, delay the first application until 2 weeks after planting.</p> <table border="1" data-bbox="764 751 1424 976"> <thead> <tr> <th data-bbox="764 751 1122 863">Trunk Diameter 12 Inches Above Soil Line</th> <th data-bbox="1122 751 1424 863">Pints of Diluted Mixture Per Tree</th> </tr> </thead> <tbody> <tr> <td data-bbox="764 863 1122 905">&lt;1 inch</td> <td data-bbox="1122 863 1424 905">2</td> </tr> <tr> <td data-bbox="764 905 1122 947">1 to 3 inches</td> <td data-bbox="1122 905 1424 947">6</td> </tr> <tr> <td data-bbox="764 947 1122 976">&gt;5 inches</td> <td data-bbox="1122 947 1424 976">8</td> </tr> </tbody> </table>		Trunk Diameter 12 Inches Above Soil Line	Pints of Diluted Mixture Per Tree	<1 inch	2	1 to 3 inches	6	>5 inches	8
Trunk Diameter 12 Inches Above Soil Line	Pints of Diluted Mixture Per Tree										
<1 inch	2										
1 to 3 inches	6										
>5 inches	8										

- ♦ For best results, use in conjunction with good cultural practices and with rootstocks that are tolerant to the disease.
- ♦ Apply this product before symptoms appear especially when conditions are favorable for disease development. This product will not revitalize trees showing moderate to severe disease symptoms.
- ♦ Do not graze or feed cover crops in treated orchards.

**ARTICHOKE, GLOBE**

DISEASES	PRODUCT USE RATE	USE INSTRUCTIONS	
Damping-off ( <i>Pythium</i> spp.)  Root Rot ( <i>Phytophthora</i> spp.)	2 to 4 pt/Acre	<p>Apply as a broadcast soil spray at planting in a sufficient amount of water to provide thorough coverage.</p> <p>Soil surface sprays of this product will not be effective until the fungicide is moved into the root zone by rainfall or irrigation.</p>	

- ♦ Do not apply this product within 200 days of harvest (PHI=200 days).

ASPARAGUS		
DISEASES	PRODUCT USE RATE	USE INSTRUCTIONS
Crown Rot Spear Rot ( <i>Phytophthora</i> spp.)	2 pt/Acre	Apply as a broadcast or banded spray to soil in a minimum of 10 gallons of water over the beds. <b>Cutting Beds:</b> Apply 30 to 60 days before first cutting. For additional control, make another application just before the beginning of harvest. <b>New Plantings:</b> Apply after planting seedlings or after covering one year old crowns. Soil surface sprays of this product will not be effective until the fungicide is moved into the root zone by rainfall or irrigation.
♦ Do not apply this product within 1 day of harvest (PHI=1day).		

AVOCADOS		
DISEASE	PRODUCT USE RATE	USE INSTRUCTIONS
Root Rot ( <i>Phytophthora cinnamomi</i> )	0.5 fl oz in 18 gal water	<b>Sleeve Drench:</b> At the time of transplanting, drench the roots inside the sleeve with 1 quart of diluted mixture per tree. The sleeve drench will not replace the soil surface applications for long-term control of root rot.
	4 to 8 pt/Acre or 1 to 2 fl oz per 1,000 gal water (3.9 - 7.8 ppm)	<b>Injection (Drip Irrigation):</b> Inject this product into the irrigation water. Time applications to occur at the start of the growing season or at transplanting and as soon as <i>Phytophthora</i> is detected in soils. Make up to two additional applications at 3-month intervals if needed. No treatment is required during the months of November through February.
	2 to 8 pt/Acre	<b>Soil Spray:</b> Apply to the soil under the drip emitter. Irrigate to incorporate residues into the soil. If there is more than one emitter per tree, distribute the total amount of product needed among the emitters. See below for application rates and timing. <b>Sprinkler Irrigation:</b> Apply the specified amount of product to the soil directly under the tree canopy. <b>Application Timing and Rate for Soil Spray and Sprinkler Irrigation:</b> Time applications to begin at the start of the growing season or at transplanting or as soon as <i>Phytophthora</i> is detected in soils. Make up to two additional applications at 3-month intervals if needed. No treatment is required during the months of November through February. Increase the application rate as the canopy diameter increases. For trees with a canopy diameter of 2 ft, use 2 pints/A. For trees with a canopy diameter of 15 ft or more, use 8 pints/A.
<ul style="list-style-type: none"> <li>♦ For best results, use this product as soon as soil tests indicate the presence of <i>Phytophthora</i>.</li> <li>♦ For new plantings, use <i>Phytophthora</i>-resistant rootstocks.</li> <li>♦ Mature trees in moderate to advanced stages of decline cannot be cured with this product.</li> <li>♦ Do not apply more than 24 pints (3 gallons) per acre (6 lb a.i./A) per crop.</li> <li>♦ Do not apply within 28 days of harvest (PHI=28 days).</li> </ul>		

**BUSHBERRY SUBGROUP (13-07B):**

Aronia Berry, Buffalo Currant, Blueberries (highbush and lowbush), Chilean Guava, Cranberry (highbush), Currant (black and red), Elderberry, European Barberry, Gooseberry, Honeysuckle (edible), Huckleberry, Jostaberry, Juneberry, Lingonberry, Native Current, Salal, Sea Buckthorn, Cultivars, Varieties, and/or Hybrids of these

DISEASE	PRODUCT USE RATE	USE INSTRUCTIONS
Root Rot ( <i>Phytophthora</i> spp.)	7.2 pt/Acre or 0.5 pt / 1,000 row feet	<p><b>New Plantings:</b> Apply as a band or broadcast spray to the soil at planting. For banded applications, use an 18-inch band over the row. Make one additional application if needed to coincide with a period favorable for root rot development. Soil surface sprays of this product will not be effective until the fungicide is moved into the root zone by rainfall or irrigation.</p> <p><b>Established Plantings:</b> Apply to soil in a 3 foot band over the row before plant growth starts in the spring. Make one additional application if needed to coincide with a period favorable for root rot development. Soil surface sprays of this product will not be effective until the fungicide is moved into the root zone by rainfall or irrigation.</p>
<ul style="list-style-type: none"> <li>Use this product in conjunction with good cultural practices to minimize disease problems.</li> <li>This product will not revitalize plants showing moderate to severe root rot symptoms.</li> <li>This product may be applied on the day of harvest (PHI=0 day).</li> <li>Do not apply more than 14.4 pt/A (3.6 lb a.i./A) per crop.</li> </ul>		

**CANEBERRY Subgroup (13-07A):**

**Blackberry** (including Andean blackberry, arctic blackberry, bingleberry, black satin berry, boysenberry, brombeere, California blackberry, Chesterberry, Cherokee blackberry, Cheyenne blackberry, common blackberry, coryberry, darrowberry, dewberry, Dirksen thornless berry, evergreen blackberry, Himalayaberry, hullberry, lavacaberry, loganberry, lowberry, Lucretiaberry, mammoth blackberry, marionberry, mora, mures deronce, nectarberry, Northern dewberry, olallieberry, Orgeon evergreen berry, phenomenalberry, rangeberry, ravenberry, rossberry, Shawnee blackberry, Southern dewberry, tayberry, youngberry, zarzamora); **Loganberry; Raspberry** (black and red); **Wild Raspberry; and Cultivars, Varieties, and/or Hybrids of these**

DISEASE	PRODUCT USE RATE	USE INSTRUCTIONS
Root Rot ( <i>Phytophthora</i> spp.)	7.2 pt/Acre or 0.5 pt / 1,000 row feet	<p><b>New Plantings:</b> Apply as a band or broadcast spray to the soil at planting. For banded applications, use an 18-inch band over the row. Make one additional application to coincide with a period favorable for root rot development. Do not exceed a total of 7.2 pt/A of product per season.</p> <p><b>Established Plantings:</b> Apply to the soil surface towards the base of the plant in a 3 foot band over the row before plant growth starts in the spring. Make 1 application in the spring and another in the fall after harvest.</p>
<ul style="list-style-type: none"> <li>For best results, use this product in conjunction with good cultural practices.</li> <li>This product will not revitalize plants showing moderate to severe root rot symptoms.</li> <li>Do not apply within 45 days of harvest (PHI=45 days).</li> <li>Do not apply more than 7.2 pt/A (1.8 lb a.i./A) per crop for soil applications.</li> <li>If a foliar application of a mefenoxam product is used, do not exceed the equivalent of 0.2 lb a.i./A per crop for a maximum seasonal rate of 2.0 lb a.i./A (foliar and soil applications combined).</li> </ul>		

<b>CITRUS:</b> Calamondin Citrus citron, Citrus hybrids (including chironja, tangelo, tangor), Grapefruit, Kumquat, Lemon, Lime, Mandarin (tangerine), Orange (sour and sweet), Pummelo, Satsuma mandarin		
<b>DISEASES</b>	<b>PRODUCT USE RATE</b>	<b>USE INSTRUCTIONS</b>
Brown Rot Citrus Foot Rot Root Rot Trunk Canker Gummosis ( <i>Phytophthora</i> spp.) . . .	4 to 8 pt/Acre	<b>Resets or New Plantings</b> Apply at planting in sufficient water to obtain uniform coverage of the soil. Apply spray to the soil surface beneath the tree canopy or apply through irrigation water (micro-sprinkler or drip). Up to two more applications may be made at 3 month intervals or when root growth flushes occur.  <b>Florida, Texas and Puerto Rico:</b> Apply 4 pints/A as a soil spray or 1 pint per grove acre via injection. Make a total of 2 to 3 applications per year at one of these schedules: (1) spring & summer, (2) summer & fall, or (3) spring & summer & fall.
	2 to 3 fl oz / 100 gal water	<b>Water Ring Drench:</b> Apply 5 gallons of the mixture around the base of each tree within the watering ring of resets or new plantings.
	2 to 3 fl oz / 20 trees	<b>Individual Tree Treatment for Resets/New Plantings:</b> Mix desired amount of product in water. Apply the solution as a directed spray to individual trees (generally 8 to 12 fl oz of solution/tree) around the base of the tree and outwards to cover the fibrous root system. Follow with sprinkler irrigation to move product into the root zone. This product may be tank mixed with other pesticides registered for use on citrus.
	2 to 12 pt/Acre	<b>Established Plantings</b> <b>Soil Application:</b> Apply in sufficient water to obtain uniform coverage of the soil. Apply spray to the soil surface beneath the tree canopy or apply through irrigation water (micro-sprinkler or drip). Time applications to begin in the spring at root flush. Up to two more applications may be made when root growth flushes occur using 4 to 8 pt/A (when a total of 3 applications are made) or 12 pt/A (when a total of 2 applications are made).  <b>Florida, Texas and Puerto Rico:</b> Apply 2 pt/A as a soil spray or 1 pint per grove acre via injection to groves that have a <i>Phytophthora</i> count of 10 to 20 propagules per cubic centimeter of soil. If more than 20 propagules per cubic centimeter are present, use 4 pt/A as a spray or 2 pints per grove acre through injection. Make a total of 2 to 3 applications per year at one of these schedules: (1) spring & summer, (2) summer & fall, or (3) spring & summer & fall.
Gummosis	4 pt in 3 gal water	<b>Trunk Spray:</b> Spray the surface of the trunks using enough spray to thoroughly wet the cankers. Apply up to 3 times per year.
	4 pt in 10 gal water	<b>Trunk Spray (FL only):</b> Spray the surface of the trunks using enough spray to thoroughly wet the cankers. Apply up to 3 times per year.

- ◆ Additional directions for use are available from local extension agents.
- ◆ Where nematodes are a problem, best results can be achieved if effective EPA registered nematicides are used. Nematicides can be used in combination or in sequence with applications of this product.
- ◆ In Florida, Texas and Puerto Rico, phytotoxicity to citrus resets or new plantings (plants less than 5 years old) may be prevented by using rates no higher than 4 pt/A.
- ◆ Do not use on highly susceptible sweet orange rootstock in Florida.
- ◆ Do not apply to bare roots.
- ◆ Do not make trunk gummosis sprays and soil applications to the same tree in the same crop season.
- ◆ For trees less than 3 years old, do not tank mix herbicides with this product. First apply the herbicide and then apply this product 3 to 4 weeks later.
- ◆ Do not apply more than 24 pints (3 gallons) of this product per acre (6 lb a.i./A) per crop.

CLOVER		
DISEASES	PRODUCT USE RATE	USE INSTRUCTIONS
Damping-off ( <i>Pythium</i> spp.)  Root Rot ( <i>Phytophthora</i> spp.)	0.5 to 1 pt/Acre	<b>Soil Spray (broadcast):</b> Apply as a broadcast surface spray at planting. If seed was previously treated with a mefenoxam or metalaxyl seed treatment product, use the 0.5 pt/A rate at planting. Soil surface sprays of this product will not be effective until the fungicide is moved into the root zone by rainfall or irrigation.
◆ Do not feed green forage or cut hay within 90 days of application (PHI=90 days).		

**COLE CROPS:** Broccoli, Broccoli Raab (rapini), Brussels sprouts, Cabbage, Chinese Broccoli (gai lon), Chinese Cabbage (bok choy and napa), Chinese Mustard Cabbage (gai choy), Cauliflower, Cavalo Broccolo, Collards, Kale, Kohlrabi, Mizuna, Mustard Greens, Mustard Spinach, Turnip Greens (greens only)\*\*, Rape Greens, All hybrids and varieties of these.

\*\*Do not use foliar applications to treat dual purpose turnip cultivars or varieties which produce a harvestable root. Refer to the ROOT AND TUBER VEGETABLES section for use on turnip (root).

DISEASES	PRODUCT USE RATE	USE INSTRUCTIONS
Damping-off ( <i>Pythium</i> spp.)	0.5 to 1 pt/Acre	<b>Preplant Incorporated Application:</b> Apply as a broadcast or banded soil application in sufficient water or liquid fertilizer to provide uniform coverage and incorporate into the top 2 inches of soil. For banded applications, a 7 inch band is recommended.
Basal Stem Rot ( <i>Phytophthora</i> spp.)	2 to 4 pt/Acre	<b>Preplant Incorporated Application:</b> Apply as a broadcast or banded soil application in sufficient water or liquid fertilizer to provide uniform coverage and incorporate into the top 2 inches of soil. For banded applications, a 7 inch band is recommended.
		<b>Surface Application:</b> Apply as a broadcast or banded soil spray at planting in sufficient water or liquid fertilizer to provide uniform coverage. For banded application, a 7 inch band is recommended. Soil surface sprays of this product will not be effective until the fungicide is moved into the root zone by rainfall or irrigation.
		<b>Irrigation (drip):</b> Inject this product into the irrigation water.

Downy Mildew ( <i>Peronospora parasitica</i> )	0.25 to 0.5 pt/Acre	<p><b>Foliar Application (ground or air):</b> Use only in a tank mixture with other fungicides registered for control of downy mildew on cole crops. Apply with the full label rate of the tank mix partner fungicide.</p> <p>Begin applications when conditions are favorable for disease development but before infection is established. Continue applications at 14-day intervals.</p>
<p>♦ Do not apply more than 4 pt/A (1 lb a.i./A) per crop for soil applications and 2 pt/A (0.5 lb a.i./A) per crop for foliar applications.</p> <p><b>For Downy Mildew Control Using Foliar Applications:</b></p> <ul style="list-style-type: none"> <li>♦ Use this product only when included in a tank mixture with other EPA registered fungicides.</li> <li>♦ Do not apply this product in fields where downy mildew is already established.</li> <li>♦ Do not apply this product within 7 days of harvest (PHI=7 days)</li> </ul>		

<b>COTTON</b>		
<b>DISEASES</b>	<b>PRODUCT USE RATE</b>	<b>USE INSTRUCTIONS</b>
Seed and Root Rot ( <i>Pythium ultimum</i> )  Seedling Blight ( <i>Pythium aphanadermatum</i> )	0.15 to 0.30 fl oz / 1,000 row ft.	<b>In-furrow:</b> Apply in 5 to 15 gallons of water or liquid fertilizer at planting. Mount the spray nozzle so the spray is directed into the furrow over the seed just before the seeds are covered.

<b>CRANBERRIES</b>		
<b>DISEASE</b>	<b>PRODUCT USE RATE</b>	<b>USE INSTRUCTIONS</b>
Phytophthora Root Rot ( <i>Phytophthora</i> spp.)	2 to 3.5 pt/Acre	<b>Soil Spray (Broadcast):</b> Apply 3 times using ground or chemigation equipment. Time applications to occur first in the fall after harvest, then in the spring with a final application up to, but not later than, 45 days prior to harvest. Soil surface sprays of this product will not be effective until the fungicide is moved into the root zone by rainfall or irrigation.
<ul style="list-style-type: none"> <li>♦ Do not apply this product to cranberries by air.</li> <li>♦ Do not apply within 45 days of harvest (PHI=45 days).</li> <li>♦ Do not apply more than 10.6 pt/A (2.65 lb a.i./A) per crop.</li> </ul>		

**CUCURBIT VEGETABLES:** Chayote, Chinese Waxgourd, Citron Melon, Cucumber, Gherkin, Gourd (edible), *Momordica* Spp. (Balsam Apple, Balsam Pear, Bitter Melon, Chinese Cucumber), Muskmelon (True Cantaloupe; Cantaloupe; Casaba; Crenshaw, Honeydew, Honey Balls, Mango, Persian, Pineapple, Santa Claus, and Snake Melons), Pumpkin, Summer Squash, Winter Squash, Watermelon, all hybrids and varieties of these.

DISEASES	PRODUCT USE RATE	USE INSTRUCTIONS
Damping-off Cottony Leak ( <i>Pythium</i> spp.)	2 to 4 pt/Acre	<p><b>Pre-plant Incorporated Application:</b> Apply as a broadcast or banded soil application in sufficient water or liquid fertilizer to provide uniform coverage and incorporate in the top 2 inches of soil. For banded application, a 7 inch band is recommended.</p> <p><b>Surface Application:</b> Apply at planting as a broadcast or banded spray in sufficient water or liquid fertilizer to provide uniform coverage. Soil surface sprays of this product will not be effective until the fungicide is moved into the root zone by rainfall or irrigation. For banded application, a 7 inch band is recommended.</p> <p><b>Injection (drip):</b> This product may also be injected into the irrigation water.</p>
Root Rot ( <i>Pythium</i> spp.)	0.5 to 0.8 pt/Acre	<p><b>Soil Directed Spray:</b> If a soil application was made at planting, two additional applications may be made at 20 to 30 day intervals during the season. Direct the spray to the base of the plants and cover 6-8 inches of the soil on either side of the plants. Incorporate using either mechanical means or through irrigation to move the product into the root zone.</p> <p><b>Injection (drip):</b> This product may also be injected into the irrigation water.</p>

- ♦ Do not apply within 5 days of harvest (PHI=5 days).
- ♦ Do not exceed 4 pt/A (1 lb a.i./A) per crop for soil applications and the equivalent of 0.5 lb a.i./A per crop of foliar-applied mefenoxam product.

**FRUITING VEGETABLES (Except Cucurbits):** Eggplant, Groundcherry, Pepino, Pepper (bell pepper, chili pepper, cooking pepper, pimento, sweet pepper), Tomatillo, Tomato (see Tomato section below for specific use directions)

DISEASES	PRODUCT USE RATE	USE INSTRUCTIONS
Damping-off ( <i>Pythium</i> spp.)  Crown Rot ( <i>Phytophthora capsici</i> )	2 pt/Acre	<p>To control Crown Rot, apply before the plants are infected to obtain satisfactory control. Plants already infected with <i>Phytophthora capsici</i> cannot be cured with this product.</p> <p><b>Soil Spray (broadcast or band):</b> Apply in water or liquid fertilizer preplant or at planting. For direct seeded peppers, apply preplant or prior to emergence. For banded applications, use 12 to 16 inch band. Soil surface sprays of this product will not be effective until the fungicide is moved into the root zone by rainfall or irrigation.</p> <p><b>Injection (drip irrigation):</b> Inject this product into the irrigation water. Make up to 2 additional applications on a 30 day schedule following initial application at planting.</p>

**FRUITING VEGETABLES (Except Cucurbits):** Eggplant, Groundcherry, Pepino, Pepper (bell pepper, chili pepper, cooking pepper, pimento, sweet pepper), Tomatillo, Tomato (see Tomato section below for specific use directions)

DISEASES	PRODUCT USE RATE	USE INSTRUCTIONS
Crown Rot ( <i>Phytophthora capsici</i> )	2 pt/Acre	<p><b>Banded Spray:</b> Make 2 post-directed applications at 30 day intervals after transplanting. Direct the spray to the base of the plants and cover 6 to 8 inches of the soil on either side of the plants. Incorporate mechanically or sprinkler-irrigate to move the product into the root zone.</p> <p><b>Shank Application:</b> Apply in liquid fertilizer, shanked in as a banded treatment to either side of the plant.</p>

- ◆ This product may cause some yellowing of pepper leaves.
- ◆ Plants already infected with *Phytophthora* cannot be cured with this product.
- ◆ The foliar blight phase of *Phytophthora* cannot be controlled with foliar applications of this product.
- ◆ Do not apply within 7 days of harvest (PHI=7 days).
- ◆ Do not apply more than 6 pt/A (1.5 lb a.i./A) of this product per crop for soil applications and the equivalent of 0.5 lb a.i./A per crop of foliar-applied mefenoxam product.

**TOMATO**

Damping-off ( <i>Pythium</i> spp.)	2 to 4 pt/Acre	<p><b>Soil Spray (Broadcast or Band):</b> Apply at planting in water or liquid fertilizer. Move into soil as described in the APPLICATION INSTRUCTIONS section of the label. For banded applications, a 7 inch band is recommended.</p>
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Root and Fruit Rot ( <i>Phytophthora</i> spp.) ( <i>Pythium</i> spp.)	2 pt/Acre	<p><b>Soil spray (broadcast or band) or soil injection:</b> Apply as a directed soil surface spray under the vines or injected into the beds with water or liquid fertilizer. Move into the soil as described in the APPLICATION INSTRUCTIONS section of this label.</p> <p>Initiate control of Root and Fruit Rot with a soil application at planting as described above. Make subsequent applications through drip irrigation.</p> <p><b>Injection (drip irrigation):</b> Make the first drip application 4 to 6 weeks after planting. Make the second drip application as needed up to 4 weeks before harvest, but before the last irrigation.</p> <p>For injection applications, base rate calculations on a 7 inch band.</p>
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- ◆ Do not exceed 6 pt/A (1.5 lb a.i./A) per crop for soil applications and the equivalent of 0.5 lb a.i./A per crop of foliar-applied mefenoxam product.

**GINSENG**

DISEASES	PRODUCT USE RATE	USE INSTRUCTIONS
Phytophthora Root Rot ( <i>Phytophthora cactorum</i> )	1.5 pt/Acre	<p><b>Drench:</b> Apply in 100 to 400 gallons of water uniformly to the soil surface in the spring before the plants begin to grow.</p>

- ◆ Do not make more than 1 application of this product.

GRAPES		
DISEASE	PRODUCT USE RATE	USE INSTRUCTIONS
Root Rot Crown Rot ( <i>Phytophthora</i> spp.)	7.2 pt/Acre or 0.5 pt / 1000 row ft	<b>Soil Spray (broadcast or band):</b> Apply in the spring before the plants begin to grow. Use sufficient water to provide uniform coverage. Two additional applications may be made during periods most favorable for root rot development.  For banded applications, apply in a 3 foot band at the base of the plants.
<ul style="list-style-type: none"> <li>Do not apply within 60 days of harvest (PHI=60 days).</li> <li>Do not apply more than 21.6 pt/A (5.4 lb a.i./A) per crop for soil applications and the equivalent of 0.4 lb a.i./A per crop of foliar-applied mefenoxam product.</li> </ul>		

GRASSES, FORAGE, FODDER, HAY*		
*Includes any enclosed pasture grasses or grasses grown for hay or silage such as Bermudagrass, bluegrass, bromegrass, or fescue.		
DISEASE	PRODUCT USE RATE	USE INSTRUCTIONS
Seeding Diseases ( <i>Pythium</i> spp.)	0.5 to 2 pt/Acre	<b>Soil Spray (broadcast):</b> Apply as a broadcast soil spray at planting. Use 0.5 to 1 pt/A if grass seed was previously treated with a mefenoxam or metalaxyl seed treatment product.  Soil surface sprays of this product will not be effective until the fungicide is moved into the root zone by rainfall or irrigation.
<ul style="list-style-type: none"> <li>Do not apply to range grasses.</li> <li>Do not graze, feed green forage, or cut for hay within 60 days of last application.</li> </ul>		

HERBS (Fresh and Dried): Angelica, Balm, Basil, Borage, Burnet, Chamomile, Catnip, Chervil (dried), Chinese Chive, Chive, Cilantro (leaf), Clary, Coriander (leaf), Costmary, Curry (leaf), Dillweed, Horehound, Hyssop, Lavender, Lemongrass, Lovage (leaf), Marigold, Marjoram, Nasturtium, Parsley (dried), Pennyroyal, Rosemary, Rue, Sage, Savory (summer and winter), Sweet Bay, Tansy, Tarragon, Thyme, Wintergreen, Woodruff, Wormwood		
DISEASE	PRODUCT USE RATE	USE INSTRUCTIONS
Damping-off ( <i>Pythium</i> spp.)	2 to 4 pt/Acre	<p><b>Pre-plant Incorporated Application:</b> Apply as a broadcast or banded soil application in sufficient water or liquid fertilizer to provide uniform coverage and mechanically incorporate in the top 2 inches of soil. For banded application, a 7 inch band is recommended.</p> <p><b>Surface Application (broadcast or band):</b> Apply in sufficient water or liquid fertilizer to provide uniform coverage. For banded application, a 7 inch band is recommended.  Soil surface sprays of this product will not be effective until the fungicide is moved into the root zone by rainfall or irrigation.</p> <p><b>Banded Spray:</b> Direct sprays to baseline of plants covering 6-8 inches on each side of plants (12 to 16 inch band width/row). Apply 28 days after planting or after first cutting.</p>
<ul style="list-style-type: none"> <li>Do not apply within 21 days of harvest (PHI=21 days).</li> <li>Do not exceed 8 pt/A (2 lb a.i./A), per crop for soil applications.</li> </ul>		

HOPS		
DISEASE	PRODUCT USE RATE	USE INSTRUCTIONS
Downy Mildew ( <i>Pseudoperonospora humuli</i> )	1 pt/Acre	<b>Soil Drench:</b> Apply in a sufficient amount of water or liquid fertilizer for thorough coverage. Apply to the soil surface over the crowns after pruning but before training. Early application before shoots are 6 inches long provides best protection.
		<b>Foliar Spray:</b> Apply using ground equipment in a minimum of 50 gallons water per acre. Treat when primary infection (spikes) persists after a soil drench treatment and/or there is evidence of secondary (foliar) infection and apply this product in combination with a contact copper fungicide.
<ul style="list-style-type: none"> <li>Do not apply foliar sprays of this product without a copper fungicide registered for use on hops.</li> <li>Do not apply within 45 days of harvest (PHI=45 days).</li> <li>Do not apply more than 1 pt/A (0.25 lb a.i./A) per crop for soil applications and 2 pt/A (0.5 lb a.i./A) per crop for foliar applications.</li> </ul>		

**LEAFY VEGETABLES (Except Brassica):** Amaranth (leafy amaranth, Chinese spinach, tampala), Arugula (Roquette), Cardoon, Celery, Celuce, Chervil, Chinese Celery, Chrysanthemum (edible-leaved), Chrysanthemum (garland), Corn salad, Cress (garden), Cress (upland), Dandelion, Dock (Sorrel), Endive (Escarole), Florence Fennel (finocchio), Lettuce (head and leaf)\*\*, Orach, Parsley, Purslane (garden), Purslane (winter), Radicchio (red chicory), Rhubarb, Spinach\*\*, Spinach (New Zealand), Spinach (vine), Swiss Chard

\*\*See also Lettuce and Spinach sections below for additional use instructions

DISEASES	PRODUCT USE RATE	USE INSTRUCTIONS
Damping-off ( <i>Pythium</i> spp.)	2 to 4 pt/Acre	<b>Preplant Incorporated (broadcast or band):</b> Apply as a soil application in sufficient water or liquid fertilizer to provide uniform coverage and mechanically incorporate in the top 2 inches of soil. For banded application, a 7-inch band is recommended.
		<b>Surface Application (broadcast or band):</b> Apply at planting in sufficient water or liquid fertilizer to provide uniform coverage. For banded application, a 7-inch band is recommended.  Soil surface sprays of this product will not be effective until the fungicide is moved into the root zone by rainfall or irrigation.

**LETTUCE (Head and Leaf)**

Downy Mildew ( <i>Bremia lactucae</i> )	0.25 to 0.5 pt/Acre	<b>Foliar Application (ground or air):</b> Use only in a tank mixture with other fungicides registered for control of downy mildew. Apply with the full label rate of the tank mix partner fungicide.  Apply at 14-day intervals beginning when conditions are favorable for disease development but before infection is established.
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<b>SPINACH</b>		
<p>White Rust (<i>Albugo occidentalis</i>)</p> <p>Downy Mildew (<i>Peronospora effusa</i>)</p>	<p>0.5 pt/Acre</p>	<p><b>Shank Application:</b> In addition to the preplant incorporated or surface application at planting described above for leafy vegetables, shank-in this product around 21 days after planting or after the first cutting. A second application may be shanked in after the next cutting, but at least 21 days after the last application. If less than the full bed is treated, use the formula in the APPLICATION INSTRUCTIONS section of the label to determine the amount of this product needed per acre. If this product is injected into the beds with liquid fertilizer, base calculations on a 7 inch band. Use sufficient mechanical or bypass agitation to keep this product mixed with the water or fertilizer.</p> <p>The additional shank applications noted above provide continuing control of white rust. However white rust can only be controlled in a preventative disease control program that begins with an application of this product to the soil at planting. If this product is not used at planting, do not use it at any other time throughout the season. Do not use this product in foliar applications or in situations where white rust infections are already established. The use of this product in curative applications greatly increases the risk of the fungus developing insensitivity to mefenoxam. The development of insensitivity will destroy the effectiveness of this product in controlling white rust.</p>
<p><b><u>For all Leafy Vegetable crops except Spinach</u></b></p> <ul style="list-style-type: none"> <li>◆ Do not apply within 7 days of harvest (PHI=7 days).</li> </ul> <p><b><u>For Lettuce only</u></b></p> <ul style="list-style-type: none"> <li>◆ Use this product only when included in a tank mixture with other EPA registered fungicides.</li> <li>◆ Do not apply this product in fields where downy mildew is already established.</li> <li>◆ Do not apply more than 4 pt/A (1 lb a.i./A) per crop for soil applications and 1.6 pt/A (0.4 lb a.i./A) per crop for foliar applications.</li> </ul> <p><b><u>For Spinach only</u></b></p> <ul style="list-style-type: none"> <li>◆ PHI=3 days only if soil applications do not exceed 4 pt/A (1 lb a.i./A) per crop and foliar applications of mefenoxam product do not exceed the equivalent of 0.25 lb a.i./A per crop. Otherwise, the PHI is 21 days.</li> <li>◆ Do not apply more than 4 pt/A (1 lb a.i./A) per crop to soil at planting and 1 pt/A (0.25 lb a.i./A) per crop to soil post-planting, shanked-in <b>OR</b> do not apply more than 4 pt/A (1 lb a.i./A) per crop to soil at planting and the equivalent of 0.4 lb a.i./A per crop of foliar-applied mefenoxam product.</li> </ul>		

**LEGUME VEGETABLES (Succulent or Dried)\*\*:**  
 Bean (*Lupinus spp.*) (grain, lupin, sweet lupin, white lupin, white sweet lupin), Bean (*Phaseolus spp.*) (field, kidney, lima, navy, pinto, runner, snap, tepary, wax), Bean (*Vigna spp.*) (adzuki, asparagus, blackeyed pea, catjang, Chinese longbean, cowpea, crowder pea, moth, mung, rice, southern pea, urd, yardlong), Broad Bean (fava bean), Chickpea (garbanzo bean), Guar, Jackbean, Lablab bean (hyacinth bean), Lentil, Pea (*Pisum spp.*) (dwarf, edible-pod, English, field, garden, green, snow, sugar snap), Pigeon pea, Soybean (immature seed)\*\*, Sword bean

\*\*See also specific use directions below for Soybeans and Succulent Shelled Peas and Beans

DISEASES	PRODUCT USE RATE	USE INSTRUCTIONS
Damping-off Root Rot ( <i>Pythium spp.</i> )	1 to 2 pt/Acre	<p><b>Preplant Incorporation (broadcast or band):</b> Apply to soil in sufficient water or liquid fertilizer to provide uniform coverage and mechanically incorporate in the top 2 inches of soil. For banded application, a 7-inch band is recommended.</p> <p><b>Surface Application (broadcast or band):</b> Apply to soil at planting in sufficient water or liquid fertilizer to provide uniform coverage. For banded application, a 7-inch band is recommended.</p> <p>Soil surface sprays of this product will not be effective until the fungicide is moved into the root zone by rainfall or irrigation.</p>

**SOYBEANS**

Phytophthora Root and Stem Rot ( <i>Phytophthora megasprema</i> )  Pythium Damping-off ( <i>Pythium spp.</i> )	0.16 to 0.56 fl oz per 1,000 row feet	<p><b>In-Furrow:</b> Apply in-furrow with water or liquid fertilizer at planting. Position the spray so the fungicide is mixed with the soil covering the seed. Avoid spraying the seed directly with the spray solution or crop injury may occur. Use the high rate for full season control and 0.16 to 0.3 fluid ounce rate for early to mid-season control.</p>
	0.74 to 2.5 pt/Acre	<p><b>Soil Spray (broadcast or band):</b> For full season control, apply 2.5 pints per treated acre in sufficient water or liquid fertilizer to provide uniform coverage at the time of plantings. For early to mid season control, apply 0.74 to 1.5 pt/A. Move product into the seed zone after planting with 0.5 to 1 inch sprinkler irrigation.</p> <p>For banded application, a 7 inch band is recommended. Use the formula in the APPLICATION INSTRUCTIONS section of this label to calculate the amount of this product needed per acre for the band width actually used.</p>

- For soybeans:**
- ♦ Under heavy late season *Phytophthora* pressure, this product may not provide complete root and stem rot control.
  - ♦ Use the higher rate in areas with a history of heavy *Phytophthora* damage.
  - ♦ For best results, use soybean varieties that have some degree of resistance to the races of *Phytophthora* present in the field.

LEGUME VEGETABLES (Continued)		
SUCCULENT SHELLED PEAS and BEANS		
Bean (Blackeyed pea, Broad bean, Cowpea, Lima bean, Southern pea); Pea (English pea, garden pea, green pea); Pigeon pea		
Downy Mildew ( <i>Phytophthora parasitica</i> )	0.25 to 0.4 pt/Acre	<b>Foliar Application (ground or air):</b> Use only in a tank mixture with other fungicides registered for control of downy mildew. Apply with the full label rate of the tank mix partner fungicide.  Apply at 14-day intervals when conditions are favorable for disease development but before infection is established.
<b>For Succulent Shelled Peas and Beans:</b>		
<ul style="list-style-type: none"> <li>♦ For use on succulent beans east of the Mississippi River only.</li> <li>♦ Do not apply within 3 days of harvest (PHI=3 days).</li> <li>♦ Do not exceed 2 pt/A (0.5 lb a.i./A) per crop for soil applications and 1.6 pt/A (0.4 lb a.i./A) per crop for foliar applications.</li> </ul>		

ONIONS:		
<b>Bulb Onion (Subgroup 3-07A):</b> Daylily; Fritillaria; Garlic; Great-headed Garlic; Serpent Garlic; Lily; Onion; Chinese Onion; Pearl Onion; Potato Onion; Shallot; Cultivars, Varieties, and/or Hybrids of these		
<b>Green Onion (Subgroup 3-07B):</b> Chive (fresh leaves); Chinese Chive (fresh leaves); Elegans Hosta; Fritillaria (leaves); Kurrat; Lady's Leek; Leek; Wild leek; Beltsville Bunching Onion; Fresh Onion; Green Onion; Macrostem Onion; Tree Onion (tops); Welsh Onion (tops); Shallot (fresh leaves); Cultivars, Varieties, and/or Hybrids of these		
DISEASE	PRODUCT USE RATE	USE INSTRUCTIONS
Damping-off ( <i>Pythium</i> spp.)	1 to 2 pt/Acre	<p><b>Preplant Incorporated (broadcast or band):</b> Apply in sufficient water or liquid fertilizer to provide uniform coverage and mechanically incorporate in the top 2 inches of soil. For banded application, a 7 inch band is recommended.</p> <p><b>Surface Application (broadcast or band):</b> Apply at planting in sufficient water or liquid fertilizer to provide uniform coverage. For banded application, a 7 inch band is recommended. Soil surface sprays of this product will not be effective until the fungicide is moved into the root zone by rainfall or irrigation.</p>
<ul style="list-style-type: none"> <li>♦ Bulb onions: Do not apply more than 4 pt/A (1 lb a.i./A) per crop for soil applications and the equivalent of 0.5 lb a.i./A per crop of foliar-applied mefenoxam product.</li> <li>♦ Green onions: Do not apply more than 4 pt/A (1 lb a.i./A) per crop for soil applications and the equivalent of 0.3 lb a.i./A per crop of foliar-applied mefenoxam product.</li> </ul>		

PEANUTS		
DISEASES	PRODUCT USE RATE	USE INSTRUCTIONS
Pythium Root Rot ( <i>Pythium</i> spp.)	0.5 pt/Acre	<b>Seedling Disease:</b> Apply in-furrow or in a 7 inch band over the row at the time of planting. For the in-furrow applications, position the spray so the fungicide is mixed with the soil covering the seed. Avoid spraying the seed directly with the spray solution or crop injury may occur.  Soil surface sprays of this product will not be effective until the fungicide is moved into the root zone by rainfall or irrigation.
Pod Rot ( <i>Pythium</i> spp.)	1 to 2 pt/Acre	Apply at early pod set as a soil spray or at pegging through overhead irrigation systems. See the APPLICATION THROUGH IRRIGATION SYSTEMS section of this label for further instructions and precautions when making applications through irrigation systems.

PINEAPPLE		
DISEASE	PRODUCT USE RATE	USE INSTRUCTIONS
Heart Rot Disease ( <i>Phytophthora</i> spp.)	1 to 2 pt in 100 gal water	<b>Crown Dip:</b> Apply before planting. The amount of dip solution per acre will depend upon crown size, planting density, and dipping techniques. For dipping, use 75 to 100 gallons of mixture per acre.
♦ If there is a crop failure within 1 year of planting treated crowns, do not harvest plant material for animal feed.		

ROOT AND TUBER VEGETABLES: Arracacha, Arrowroot, Artichoke (Chinese and Jerusalem), Beet (garden), Beet (sugar)**, Burdock (edible), Canna (edible), Cassava (bitter and sweet), Carrots**, Celeriac (celery root), Chayote (root), Chervil (turnip-rooted), Chicory, Chufa, Dasheen (taro), Ginger, Ginseng (see Ginseng section below), Horseradish, Leren, Parsley (turnip-rooted), Parsnip, Potato**, Radish, Oriental Radish (daikon), Rutabaga, Salsify (oyster plant, black, Spanish), Skirret, Sweet potato, Tanier (cocoyam), Turmeric, Turnip, Yam bean (jicama, manioc pea), Yam (true)		
DISEASES	PRODUCT USE RATE	USE INSTRUCTIONS
Pythium Root Rot ( <i>Pythium</i> spp.)	2 to 4 pt/Acre	<b>Preplant Incorporated (broadcast or band):</b> Apply in sufficient water or liquid fertilizer to provide uniform coverage and incorporate in the top 2 inches of soil.
Phytophthora Root Rot ( <i>Phytophthora</i> spp.)		<b>Surface Application (broadcast or band):</b> Apply at planting in sufficient water or liquid fertilizer to provide uniform coverage.
♦ For banded application, a 7 inch band is recommended. Refer to the APPLICATION INSTRUCTIONS section of this label to calculate the amount of this product needed per acre for the band width actually used.		
♦ Soil surface sprays of this product will not be effective until the fungicide is moved into the root zone by rainfall or irrigation.		

<b>CARROTS</b>		
Cavity Spot Damping-off Root Dieback ( <i>Phythium</i> spp.)	1.0 to 2.6 pt/Acre  . . . . .	<p><b>Preplant Incorporated (broadcast or band):</b> Apply in a sufficient amount of water or liquid fertilizer to provide uniform coverage and mechanically incorporate in the top 2 inches of soil.</p> <p><b>Surface Application (broadcast or band):</b> Apply to soil at planting or prior to emergence in water or liquid fertilizers. Move into soil as described in the APPLICATION INSTRUCTIONS section of this label.</p> <p>For banded applications, a 7-inch band is recommended.</p>
Cavity Spot Root Dieback ( <i>Phythium</i> spp.)	0.5 to 2.0 pt/Acre  . . .	<p><b>Post Planting Applications:</b> Apply 28-50 days after planting by chemigation, ground equipment with a spray directed to the base of the plants, or shanked in with liquid fertilizer. Repeat at 14- to 21-day intervals.</p> <p>Follow all soil surface sprays of this product with the application of one inch of water by irrigation to allow movement of the fungicide into the root zone.</p> <p><b>Directed Spray (Broadcast or band):</b> Apply as a spray directed to the base of the plants. Make a maximum of 4 applications beginning 40-60 days after planting and then continue at 14- to 21-day intervals. Use a sufficient amount of water to provide uniform coverage.</p> <p>For banded applications, use a 7-inch band for best results.</p> <p><b>Irrigation:</b> Inject the product into the irrigation water.</p>
<ul style="list-style-type: none"> <li>◆ For control of cavity spot, best results are obtained when this product is used in a preventative disease control program that incorporates an application at planting followed by one or more supplemental applications.</li> <li>◆ Do not apply within 7 days of harvest (PHI=7 days).</li> <li>◆ Do not exceed a total of 3 pt/A (0.75 lb a.i./A) per crop for post planting applications.</li> <li>◆ Do not exceed a total of 5.6 pt/A (1.4 lb a.i./A) per crop for all applications combined. The total may be split as follows:</li> <li>◆ Do not apply more than 2.6 pt/A (0.65 lb a.i./A) per crop for soil applications and the equivalent of 0.75 lb a.i./A per crop for foliar applications.</li> </ul>		

<b>POTATOES</b>		
<p>Pythium Leak (<i>Pythium</i> spp.)</p> <p>Pink Rot (<i>Phytophthora erythroseptica</i>)</p> <p>Pythium Seedling Disease (<i>Pythium</i> spp.)</p>	<p>0.84 fl oz / 1,000 row feet</p>	<p><b>In-Furrow Application:</b> Apply to row on a 6 to 8 inch band at planting in a minimum of 3 gallons of water per acre. Make application directly over the seed pieces prior to row closure.</p> <p><b>Use rates for common row spacing:</b></p> <ul style="list-style-type: none"> <li>♦ 11.6 fl oz/acre for 38 inch row spacing (13,754 row feet/acre)</li> <li>♦ 12.2 fl oz/acre for 36 inch row spacing (14,520 row feet/acre)</li> <li>♦ 13 fl oz/acre for 34 inch row spacing (15,374 row feet/acre)</li> </ul> <p>You may need to follow this in-furrow application with a foliar applied fungicide at tuber initiation:</p> <ul style="list-style-type: none"> <li>• When conditions are conducive to disease development.</li> <li>• When variety planted is susceptible or moderately susceptible (pink rot/<i>Pythium</i> leak).</li> <li>• In areas with a long growing season.</li> </ul> <p>This product may be impregnated on dry fertilizer or applied in combination with liquid fertilizers.</p>
<p><b>Storage Rots</b></p> <p>Pythium Leak (<i>Pythium</i> spp.)</p> <p>Pink Rot (<i>Phytophthora erythroseptica</i>)</p>	<p>6.4 fl oz/Acre.</p>	<p><b>Control of storage rot:</b> Make foliar applications beginning at flowering and repeat after 14 days. Make a third application 14 days after the second application to fields that have a history of storage rot. Tank mix or premix this product with chlorothalonil or mancozeb when conditions favor foliar disease outbreaks..</p>
<ul style="list-style-type: none"> <li>♦ Do not use the "dribble" application method.</li> <li>♦ If foliar application is used, do not harvest within 14 days of application (PHI=14 days).</li> <li>♦ Do not exceed 1.36 pt/A (0.34 lb a.i./A) per crop for soil applications and 1.6 pt/A (0.4 lb a.i./A) per crop for foliar applications.</li> </ul>		
<b>SUGAR BEETS</b>		
<p>Pythium Root Rot (<i>Pythium</i> spp.)</p>	<p>2 to 4 pt/Acre</p>	<p><b>Preplant Incorporated (broadcast or band):</b> Apply in sufficient water or liquid fertilizer to provide uniform coverage and mechanically incorporate in the top two inches of soil.</p> <p>For banded application, a 7-inch band is recommended. Use the formula in the APPLICATION INSTRUCTIONS section of this label to calculate the amount of this product needed per acre for the band width actually used.</p> <p><b>Surface Application (broadcast or band):</b> Apply at planting in sufficient water or liquid fertilizer to provide uniform coverage.</p> <p>For banded application, a 7-inch band is recommended. Use the formula in the APPLICATION INSTRUCTIONS section of this label to calculate the amount of this product needed per acre for the band width actually used.</p> <p>Soil surface sprays of this product will not be effective until the fungicide is moved into the root zone by rainfall or irrigation.</p>

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**STONE FRUITS:** Apricot, Cherry (sweet and tart), Nectarine, Peach, Plum (Chickasaw, Damson, Japanese), Plumcot, Prune (fresh), Hybrids or cultivars of these

DISEASES	PRODUCT USE RATE	USE INSTRUCTIONS
Crown Rot Collar Rot Root Rot ( <i>Phytophthora</i> spp.)	8 pt/Acre or 3 fl oz / 1,000 ft <sup>2</sup>	<p><b>Surface Application (broadcast or band):</b> Apply to soil 2 weeks after planting (new plantings) or in the spring before plant growth begins (established plantings). Use sufficient water to obtain thorough coverage of the soil under the canopy of the trees. Treat sufficient surface area to cover the root zone of the plants.</p> <p>Make additional applications at 2 to 3 month intervals depending on disease pressure. Up to 3 applications may be made per year.</p> <p>For intense plantings (2 to 3 times the normal planting rate) apply on a per area basis (1,000 square feet).</p> <p>Soil surface sprays of this product will not be effective until the fungicide is moved into the root zone by rainfall or irrigation.</p>
<ul style="list-style-type: none"> <li>♦ Apply before symptoms appear. This product will not revitalize trees showing moderate to severe disease symptoms.</li> <li>♦ Do not concentrate the treatment around the tree trunks or injury may occur.</li> <li>♦ Do not apply to trees under stress.</li> <li>♦ In California, do not apply this product to newly planted trees within 45 days of planting. Some varieties may exhibit chlorosis on leaf margins.</li> <li>♦ Do not graze livestock in treated areas.</li> <li>♦ Do not graze or feed cover crops grown in treated orchards.</li> <li>♦ Do not make more than 3 applications per year.</li> <li>♦ Do not apply more than 24 pints (3 gallons) per acre (6 lb a.i./A) per crop.</li> </ul>		

**STRAWBERRIES**

DISEASES	PRODUCT USE RATE	USE INSTRUCTIONS
Red Stele ( <i>Phytophthora fragariae</i> )  Vascular Collapse ( <i>P. cactorum</i> )  Leather Rot ( <i>P. cactorum</i> )	2 pt/Acre	<p><b>Annual Plantings:</b> Apply in banded sprays or through drip irrigation in sufficient water to move the fungicide into the root zone of the plants.</p> <p>Apply up to 3 times per crop:</p> <ul style="list-style-type: none"> <li>• First application after transplanting.</li> <li>• Second application 30 days before the beginning of harvest or at fruit set</li> <li>• Third application during the harvest season depending on environmental conditions and disease pressure.</li> </ul> <p><b>Established Plantings:</b> Apply in banded sprays or through drip irrigation in sufficient water to move the fungicide into the root zone of the plants.</p> <p>Apply up to 3 times per crop:</p> <ul style="list-style-type: none"> <li>• First application in the spring after the ground thaws and before first bloom.</li> <li>• Second application after harvest in the fall.</li> <li>• For control of leather rot, make an additional application during the growing season at fruit set.</li> </ul>

<b>STRAWBERRIES (Continued)</b>
<ul style="list-style-type: none"> <li>♦ For drip irrigation, calculate the use rate as a band application with a band width equal to the root zone width and inject this product into the irrigation water.</li> <li>♦ For low annual rainfall areas, surface applications of this product need to be moved into the root zone by rainfall, overhead irrigation, or mechanical incorporation.</li> <li>♦ Application of this product may be made on the day of harvest (PHI=0 day).</li> <li>♦ Do not apply more than 6 pt/A (1.5 lb a.i./A) per crop.</li> </ul>

<b>TOBACCO</b>		
<b>DISEASES</b>	<b>PRODUCT USE RATE</b>	<b>USE INSTRUCTIONS</b>
Damping-off ( <i>Pythium</i> spp.)	1 to 2 pt/Acre or 0.5 to 1 fl oz / 150 sq yd	<b>Soil spray (broadcast):</b> Apply in 50 gallons of water (2 gallons water per 150 square yards) as a preplant soil application before or at time of planting. Use the higher application rate on broadleaf tobacco. Move the product into the seed zone after planting as described in the APPLICATION INSTRUCTIONS section of this label.
Black Shank ( <i>Phytophthora parasitica</i> <i>var. nicotiana</i> )	For conventional till: 2 to 6 pt/Acre  For no-till tobacco: 1 to 2 pt/Acre	<b>Pre-transplant Soil Spray (broadcast):</b> Apply to the soil within one week of planting. Incorporate in the top 2 to 4 inches of soil. Use the high rate if the disease epidemic is expected to be severe. In FL and GA, use 6 pints per acre where black shank is severe.  Apply preventively for effective black shank control. If black shank is expected early in the season, apply as near as possible to transplanting followed by sequential applications.
	For conventional till: 2 to 4 pt/Acre  For no-till tobacco: 1 to 2 pt/Acre	<b>Soil Spray (broadcast or band):</b> Apply once at lay-by or make a first application at the first cultivation and a second application at lay-by. Position the nozzles so the spray is deposited under the plants and covered with soil by the cultivator. Move into soil as described in the APPLICATION INSTRUCTIONS section of this label. Use the high rate if disease pressure is expected to be severe.  Apply preventively for effective black shank control. If black shank is expected early in the season, apply as near as possible to transplanting followed by sequential applications.
Blue Mold ( <i>Peronospora tabacina</i> )	For conventional till and no-till: 1 to 2 pt/Acre	<b>Pre-transplant Soil Spray (broadcast):</b> Apply as a broadcast soil application prior to transplanting and incorporate in the top 2 to 4 inches of soil before forming beds. Under low disease pressure or for early season control, use the low rate. Use the high rate for high disease pressure, extended control, and burley and other tobacco types other than flue-cured.
	For conventional till: 1 pt/Acre  For no-till tobacco: 1 to 2 pt/Acre	<b>Post-transplant Soil spray (band):</b> If a pre-transplant application was made, make a supplemental application at lay-by or the last cultivation. Position the nozzles so that the spray is deposited under the plants and is covered by soil by the cultivator.

<p><b>TOBACCO (Continued)</b></p> <ul style="list-style-type: none"> <li>• Consult local extension bulletins for additional use directions.</li> <li>• For best results against black shank, use tobacco varieties that have high resistance to black shank and use crop rotation.</li> <li>• In fields where there is a history of high black shank incidence, use the highest rate and plant a variety that is resistant to the race of <i>Phytophthora</i> present in the field. (Burley L8 hybrids are resistant only to <i>Phytophthora</i> Race 0).</li> <li>• Do not use on highly susceptible flue-cured varieties in areas with high black shank incidence.</li> <li>• Do not use this product for black shank control in PA.</li> <li>• Failure to adequately control nematodes in fields treated with this product may result in poor control of black shank.</li> <li>♦ Do not apply more than 6 pt/A (1.5 lb a.i./A) per crop.</li> </ul>
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<p><b>TREE NUTS:</b> Almonds, Walnuts</p>		
DISEASES	PRODUCT USE RATE	USE INSTRUCTIONS
Crown Rot Collar Rot Root Rot ( <i>Phytophthora</i> spp.)	8 pt/Acre or 3 fl oz / 1,000 ft <sup>2</sup>	<p><b>Soil spray (broadcast or band):</b> Apply under the tree canopy to cover the root zone two weeks after planting (new plantings) or in the spring before growth begins (established plantings). Move into soil as described in the APPLICATION INSTRUCTIONS section of this label.</p> <p>Additional applications may be made at 2 to 3 month intervals depending on disease pressure. Make up to 3 applications per year.</p> <p>For intense plantings (2 to 3 times the normal planning rate), apply on a per area basis (1,000 square feet).</p>
<ul style="list-style-type: none"> <li>♦ Apply before symptoms appear. This product will not revitalize trees showing moderate to severe disease symptoms.</li> <li>♦ Do not graze livestock in treated areas.</li> <li>♦ Do not graze or feed cover crops grown in treated orchards.</li> <li>♦ Do not concentrate the treatment around the tree trunks or injury may occur.</li> <li>♦ Do not apply to trees under stress.</li> <li>♦ In California, do not apply this product to newly planted trees within 45 days of planting. Some varieties may exhibit chlorosis on leaf margins.</li> <li>♦ Do not apply more than 24 pints (3 gallons) per acre (6 lb a.i./A) per crop.</li> </ul>		

<p><b>TROPICAL FRUIT:</b> Atemoya, Black Sapote, Canistel, Chemimoya, Custard Apple, Kiwifruit, Llana, Mamey Sapote, Mango, Papaya, Sapodilla, Soursop Birida, Sugar Apple, Star Apple, Starfruit</p>		
DISEASES	PRODUCT USE RATE	USE INSTRUCTIONS
<p><b>ATEMOYA, CHERIMOYA, CUSTARD APPLE, LLAMA, SOURSOP BIRIDA, SUGAR APPLE</b></p>		
Phytophthora Root and Crown Rot ( <i>Phytophthora</i> spp.) Pythium Root and Crown Rot Damping-off ( <i>Pythium</i> spp.)	3 to 6 pt/Acre	<p><b>Soil Drench:</b> Apply to the soil surface spray in sufficient water or liquid fertilizer to obtain thorough coverage of the soil under the canopy of trees.</p> <p>Make one application in the spring at root growth flush and a second application in the fall.</p>
<ul style="list-style-type: none"> <li>♦ Do not apply within 30 days of harvest (PHI=30 days).</li> </ul>		

BLACK SAPOTE, CANISTEL, MAMEY SAPOTE, MANGO, PAPAYA, SAPODILLA, STAR APPLE		
Root Rot ( <i>Phytophthora</i> spp.)	3 to 6 pt/Acre	<p><b>Soil Drench:</b> Apply to the soil surface in sufficient water or liquid fertilizer to obtain thorough coverage of the soil under the canopy of trees. To determine the amount of solution required, measure the amount of water needed to drench an area of 1 square foot around one plant. Multiply that volume by the total number of plants in an acre. Add this product to this amount of water and drench plants.</p> <p>Two applications may be made per growing season. Make the first application at transplanting or in the spring at root growth flush. Make the second application at least 1 day prior to harvest.</p>
Damping-off ( <i>Pythium</i> spp.)		
<ul style="list-style-type: none"> <li>Do not apply within 1 day of harvest (PHI=1 day).</li> <li>Do not apply more than 12 pt/A (3.0 lb a.i./A) per season.</li> </ul>		
KIWIFRUIT		
Root and Crown Rot ( <i>Pythium</i> and <i>Phytophthora</i> spp.)	11.2 to 22.4 fl oz / 40 gal of water	<p><b>Soil Drench:</b> Apply 1 quart of solution as a soil drench in a one square foot area around the base of each vine. At the rate of 11.2 to 22.4 fluid ounces, this will apply 0.175 to 0.350 lb a.i./A if the planting density is 160 vines per acre.</p> <p>Make the first application in the fall after harvest or in February or early March. Make a second application in the spring or approximately 60 days after the February or March application. Move into soil as described in the APPLICATION INSTRUCTIONS section of the label.</p>
	22.4 fl oz	<p><b>Soil spray (band):</b> Make up to 5 applications as a soil spray in a 2- to 3-foot band on each side of the row. Begin applications in April and follow with two additional applications at 30-day intervals. Make the fourth application in September and the fifth application approximately 30 days later, which must be no less than 7 days before harvest.</p>
<ul style="list-style-type: none"> <li>Do not apply within 7 days of harvest (PHI=7 days).</li> <li>Do not apply more than 7 pt/A (1.75 lb a.i./A) per growing season.</li> </ul>		
STARFRUIT		
Phytophthora Root and Crown Rot ( <i>Phytophthora</i> spp.)	3 to 6 pt/Acre	<p><b>Soil Drench:</b> Apply in sufficient water or liquid fertilizer to provide an adequate soil drench. Direct applications to the soil surface under the canopy of the trees.</p> <p>Make one application in the spring when root growth begins and a second application in the fall.</p>
Pythium Root and Crown Rot ( <i>Pythium</i> spp.)		
<ul style="list-style-type: none"> <li>Do not apply within 30 days of harvest (PHI=30 days).</li> </ul>		

## STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

**PESTICIDE STORAGE:** Store at temperatures above 40°F. Crystals may form at lower storage temperatures. If this occurs, place the product in a warm room (68°F or above) and roll or shake the container at frequent intervals until all crystals are dissolved.

**PESTICIDE DISPOSAL:** Open dumping is prohibited. Wastes resulting from the use of this product are acutely toxic. Improper disposal of unused pesticide, spray mixture or rinsate is a violation of Federal law. Pesticide, spray mixture or rinsate that cannot be used according to the label instruction must be disposed of according to Federal, state or local procedures. For guidance in proper disposal methods, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office.

### CONTAINER HANDLING:

[Note to Reviewer: The following statement will be included on all Final Printed Labels bearing multiple Container Handling statements] **NOTE:** This product is available in multiple containers. Refer to the Net Contents section of this product's labeling for the applicable "Nonrefillable" or "Refillable" designation. Follow the container handling instructions below that apply to your container type/size."

**Nonrefillable Containers 5 Gallons or Less:** Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned stay out of smoke.

**Nonrefillable containers larger than 5 gallons:** Nonrefillable container. Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

**Refillable containers larger than 5 gallons:** Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water and, if possible, spray all sides while adding water. If practical, agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

**WARRANTY DISCLAIMER**

The directions for use of this product must be followed carefully. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, (1) THE GOODS DELIVERED TO YOU ARE FURNISHED "AS IS" BY MANUFACTURER OR SELLER AND (2) MANUFACTURER AND SELLER MAKE NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND TO BUYER OR USER, EITHER EXPRESS OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD, INCLUDING, BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE, OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULAR TRADE USAGE. UNINTENDED CONSEQUENCES, INCLUDING BUT NOT LIMITED TO INEFFECTIVENESS, MAY RESULT BECAUSE OF SUCH FACTORS AS THE PRESENCE OR ABSENCE OF OTHER MATERIALS USED IN COMBINATION WITH THE GOODS, OR THE MANNER OF USE OR APPLICATION, INCLUDING WEATHER, ALL OF WHICH ARE BEYOND THE CONTROL OF MANUFACTURER OR SELLER AND ASSUMED BY BUYER OR USER. THIS WRITING CONTAINS ALL OF THE REPRESENTATIONS AND AGREEMENTS BETWEEN BUYER, MANUFACTURER AND SELLER, AND NO PERSON OR AGENT OF MANUFACTURER OR SELLER HAS ANY AUTHORITY TO MAKE ANY REPRESENTATION OR WARRANTY OR AGREEMENT RELATING IN ANY WAY TO THESE GOODS.

**LIMITATION OF LIABILITY**

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, MANUFACTURER OR SELLER SHALL NOT BE LIABLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, OR FOR DAMAGES IN THEIR NATURE OF PENALTIES RELATING TO THE GOODS SOLD, INCLUDING USE, APPLICATION, HANDLING, AND DISPOSAL. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, MANUFACTURER OR SELLER SHALL NOT BE LIABLE TO BUYER OR USER BY WAY OF INDEMNIFICATION TO BUYER OR TO CUSTOMERS OF BUYER, IF ANY, OR FOR ANY DAMAGES OR SUMS OF MONEY, CLAIMS OR DEMANDS WHATSOEVER, RESULTING FROM OR BY REASON OF, OR ARISING OUT OF THE MISUSE, OR FAILURE TO FOLLOW LABEL WARNINGS OR INSTRUCTIONS FOR USE, OF THE GOODS SOLD BY MANUFACTURER OR SELLER TO BUYER. ALL SUCH RISKS SHALL BE ASSUMED BY THE BUYER, USER, OR ITS CUSTOMERS. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BUYER'S OR USER'S EXCLUSIVE REMEDY, AND MANUFACTURER'S OR SELLER'S TOTAL LIABILITY SHALL BE FOR DAMAGES NOT EXCEEDING THE COST OF THE PRODUCT.

**If you do not agree with or do not accept any of the directions for use, the warranty disclaimers, or limitations of liability, do not use the product, and return it unopened to the Seller, and the purchase price will be refunded.**

(RV022514)

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# SUPPLEMENTAL LABEL

# ULTRA FLOURISH®

## AGRICULTURAL FUNGICIDE

ACCEPTED  
MAR 04 2014  
Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg No. 55146-73

EPA Reg. No. 55146-73  
(Approval Date)

This supplemental label expires February 27, 2017, and must not be used or distributed after this date.

### LABEL REVISION

Use Directions for Control of Damping-off, Black Shank, and Blue Mold on Tobacco

READ AND FOLLOW THE ENTIRE LABEL BOOKLET FOR THIS PRODUCT BEFORE PROCEEDING WITH THE USE DIRECTIONS CONTAINED IN THIS SUPPLEMENTAL LABELING.  
"Label" as used in this supplemental labeling refers to the label booklet for this product and this supplemental.

### DIRECTIONS FOR USE

IT IS A VIOLATION OF FEDERAL LAW TO USE THIS PRODUCT IN ANY MANNER INCONSISTENT WITH ITS LABELING.

This label must be in the possession of the user at the time of application.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

ALL APPLICABLE DIRECTIONS, RESTRICTIONS AND PRECAUTIONS IN THE PRODUCT LABEL BOOKLET MUST BE FOLLOWED, INCLUDING STATEMENTS PERTAINING TO THE WORKER PROTECTION STANDARDS, ON THE EPA REGISTERED LABEL.

### TOBACCO

DISEASE	PRODUCT USE RATE	USE INSTRUCTIONS
Damping-off ( <i>Pythium</i> spp.)	1 to 2 pt/Acre or 0.5 to 1 fl oz / 150 sq yd	<b>Soil spray (broadcast):</b> Apply in 50 gallons of water (2 gallons water per 150 square yards) as a preplant soil application before or at time of planting. Use the higher application rate on broadleaf tobacco. Move the product into the seed zone after planting as described in the APPLICATION INSTRUCTIONS section of this label.
Black Shank ( <i>Phytophthora parasitica</i> var. <i>nicotiana</i> )	For conventional till: 2 to 6 pt/Acre	<b>Pre-transplant Soil Spray (broadcast):</b> Apply to the soil within one week of planting. Incorporate in the top 2 to 4 inches of soil. Use the high rate if the disease epidemic is expected to be severe. In FL and GA, use 6 pints per acre where black shank is severe.
	For no-till tobacco: 1 to 2 pt/Acre	Apply preventively for effective black shank control. If black shank is expected early in the season, apply as near as possible to transplanting followed by sequential applications.
	For conventional till: 2 to 4 pt/Acre	<b>Soil Spray (broadcast or band):</b> Apply once at lay-by or make a first application at the first cultivation and a second application at lay-by. Position the nozzles so the spray is deposited under the plants and covered with soil by the cultivator. Move into soil as described in the APPLICATION INSTRUCTIONS section of this label. Use the high rate if disease pressure is expected to be severe.
	For no-till tobacco: 1 to 2 pt/Acre	Apply preventively for effective black shank control. If black shank is expected early in the season, apply as near as possible to transplanting followed by sequential applications.

**TOBACCO (Continued)**

DISEASE	PRODUCT USE RATE	USE INSTRUCTIONS
Blue Mold <i>(Peronospora tabacina)</i>	For conventional till and no-till: 1 to 2 pt/Acre	<b>Pre-transplant Soil Spray (broadcast):</b> Apply as a broadcast soil application prior to transplanting and incorporate in the top 2 to 4 inches of soil before forming beds. Under low disease pressure or for early season control, use the low rate. Use the high rate for high disease pressure, extended control, and burley and other tobacco types other than flue-cured.
	For conventional till: 1 pt/Acre  For no-till tobacco: 1 to 2 pt/Acre	<b>Post-transplant Soil spray (band):</b> If a pre-transplant application was made, make a supplemental application at lay-by or the last cultivation. Position the nozzles so that the spray is deposited under the plants and is covered by soil by the cultivator.

- Consult local extension bulletins for additional use directions.
- For best results against black shank, use tobacco varieties that have high resistance to black shank and use crop rotation.
- In fields where there is a history of high black shank incidence, use the highest rate and plant a variety that is resistant to the race of *Phytophthora* present in the field. (Burley L8 hybrids are resistant only to *Phytophthora* Race 0).
- Do not use on highly susceptible flue-cured varieties in areas with high black shank incidence.
- Do not use this product for black shank control in PA.
- Failure to adequately control nematodes in fields treated with this product may result in poor control of black shank.
- Do not apply more than 6 pt/A (1.5 lb a.i./A) per crop.

**NOTICE**

Read the "WARRANTY DISCLAIMER" and "LIMITATION OF LIABILITY" in the label booklet for this product before using this product. Those terms apply to this supplemental labeling and if those terms are not acceptable, return the product unopened at once.

**Manufactured For NUFARM AMERICAS INC. AGT DIVISION  
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